



# National Infrastructure Protection Plan

## Education and Awareness

The National Infrastructure Protection Plan (NIPP) establishes a framework to build national awareness and enable the education and training needed to ensure an effective, efficient critical infrastructure and key resources (CIKR) protection program over the long term.

National education and awareness efforts support NIPP-related CIKR protection programs, investments, and activities by ensuring a focused understanding of the all-hazards threat environment. These programs emphasize the importance of ongoing efforts by government and private sector partners alike and are vital to ensuring that NIPP security partners are both skilled and able to undertake CIKR protection responsibilities now and in the future.

### Building National Awareness

The objectives of national awareness programs are to:

- Encourage the incorporation of CIKR protection and resiliency considerations into business planning and operations (including employee and senior manager education and training programs) across all levels of government and the private sector;
- Support public and private sector decision making, enabling the planning of relevant and effective protection strategies, and informing resource allocation processes;
- Foster understanding of CIKR dependencies and interdependencies and the value of cross-sector CIKR protection and resiliency planning down to the community level;
- Maintain public understanding of the evolving threat to CIKR as assessed by the intelligence community

and in the context of the Homeland Security Advisory System; and

- Build public understanding of efforts to address the threat environment and enhance protection and rapid restoration of the Nation's CIKR.

### Enabling Education Programs

Building individual and organizational expertise to implement CIKR activities requires a concerted effort to attract, train, and maintain the workforce of today and tomorrow. Given the complexity of the Nation's infrastructure and the range of competencies and skills required at all levels, a multi-tiered approach to education and training is needed to reach various audiences through technical, academic, and professional development programs.

DHS, Sector-Specific Agencies (SSAs), and other Federal departments and agencies also coordinate with the CIKR sectors on efforts to increase cyber security, such as DHS' Control Systems Security and Critical Infrastructure Protection Cyber Security Programs. These programs provide the sectors with subject matter expertise, recommended practices, tools, and training courses. In addition, DHS conducts cyber exercises with its CIKR protection partners, such as the Cyber Storm exercise series.

### **Types of Expertise for CIKR Protection**

The NIPP emphasizes the need for the following types of expertise as relevant for CIKR protection professionals:

- Risk assessment/risk management and related concepts used in business continuity planning;
- Cost-benefit analysis to inform risk management priorities;
- Analysis of insider threats to CIKR and applicable countermeasures;
- Analysis of physical and cyber threats to CIKR, including control systems;
- CIKR dependency and interdependency analyses;
- International aspects of CIKR protection; and
- Best practices and technical capabilities for CIKR protection, business continuity and resiliency; and information sharing.

### **Individual Education and Training**

The NIPP recognizes the importance of leveraging existing accredited academic programs, professional certification standards, and technical training programs. This requires an effort with a national scope that includes, but is not limited to, the following components:

- Technical training to provide individuals with the skills needed to perform their roles and responsibilities under the NIPP;
- Academic and research programs that result in formal degrees from accredited institutions; and
- Professional continuing education, which incorporates the latest advances in CIKR risk management.

### **Organizational Training and Exercises**

Building and maintaining organizational and sector expertise requires a comprehensive exercise program to test and validate the processes detailed in the NIPP and the National Response Framework (NRF) and NRF CIKR Support Annex, in the context of scenarios involving terrorist incidents, natural disasters, and other emergencies. National-level programs include:

- The National Exercise Program;
- The Homeland Security Exercise and Evaluation Program; and
- National Cyber Exercises.



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**To obtain further information on available resources, please contact [NIPP@dhs.gov](mailto:NIPP@dhs.gov).**